# HEXAGON TRANSPORTATION CONSULTANTS, INC.

### Memorandum

Date:	May 27, 2021
То:	Mr. Vamadevan Namboodiri, Vidyarambh Santa Clara, LLC
From:	Gary Black, Katie Riutta
Subject:	Trip Generation and VMT Analyses for the Existing and Proposed Additional Daycare Space in Santa Clara, California

Hexagon Transportation Consultants, Inc. has completed trip generation and vehicle miles traveled analyses for the existing and proposed additional daycare space at 2931 El Camino Real in Santa Clara, California. The project site is located on the north side of El Camino Real, between Calabazas Boulevard and Kiely Boulevard. The site already is developed with a daycare operation, with an approximately 9,000 square-foot daycare building and a 3,000 square-foot auxiliary storage building. The proposed project would add a new 4,307 square-foot daycare building to the vacant land between the existing daycare building and the existing auxiliary storage building (see Figure 1). Access to the project site would be provided via the existing driveways on El Camino Real. The drop-off point for the additional programming would be in the existing parking area at the back of the site.

The daycare currently serves 117 pre-school students and 50 after-school students, with 9 to 12 employees. Of the 117 pre-school students, 70 students attend full time and 47 students attend part time. The proposed project would add up to 48 full time toddlers, 25 new after-school students, and 10 to 13 new employees. Therefore, the daycare would accommodate a total of 240 students and 19 to 25 employees. This analysis presents the trip generation and VMT for the total number of students that would attend the daycare under the full operation of the project.

## **Project Trip Generation**

Through empirical research, data have been collected that quantify the amount of traffic produced by many types of land uses. The research is compiled in the manual entitled *Trip Generation*, 10<sup>th</sup> *Edition*, published by the Institute of Transportation Engineers' (ITE). The magnitude of traffic added to the roadway system by a particular development is estimated by multiplying the applicable trip generation rates by the size of the development. ITE trip generation rates for Day Care Center (Land Use 565) were used for this study.

Table 1 shows the drop-off and pick-up periods for the three existing programs and two proposed programs. Since the drop-off and pick-up periods do not necessarily overlap, the AM and PM peak hour trips were estimated using the maximum number of students that would be dropped off or picked up during any one-hour period (see Table 2). Therefore, the AM peak hour trips were estimated using 118 students, and the PM peak hour trips were estimated using 123 students. The project's daily trips were estimated using the total number of students that would attend the daycare. As shown in Table 3, the project is estimated to generate 982 daily vehicle trips, with 92 trips occurring during the AM peak hour and 97 trips during the PM peak hour. These trip estimates include staff.











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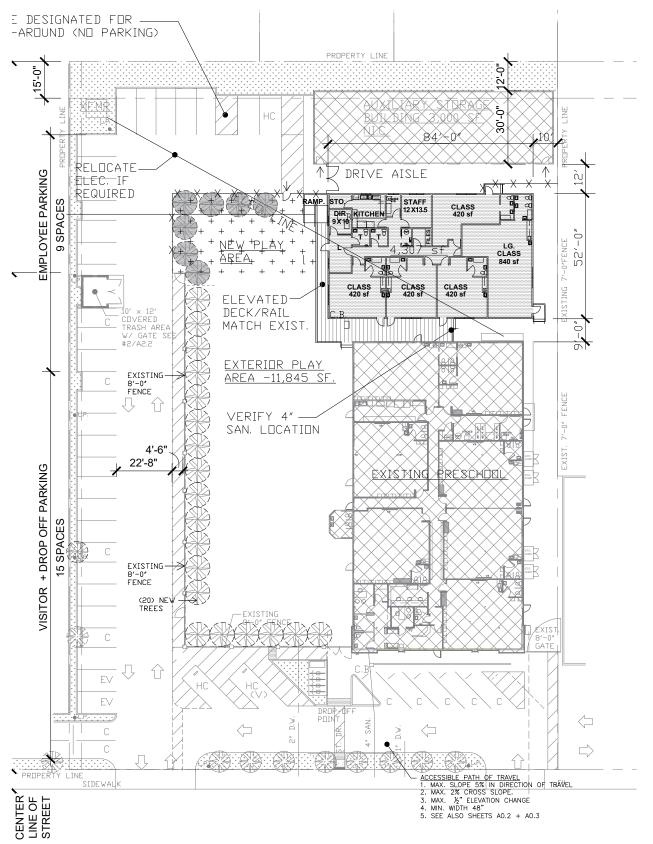


Figure 1 Site Plan





### Table 1 Program Drop-off and Pick-up Periods

Program	# Students	Drop-off Period	Pick-up Period					
Full-time Pre-school <sup>1</sup>	70	8:00 - 8:30 AM	5:00 - 5:30 PM					
Part-time Pre-school <sup>1</sup>	47	9:00 - 9:30 AM	12:00 - 12:30 PM					
After-school <sup>1</sup>	50	1:30 - 3:30 PM	6:00 - 6:30 PM					
Full-time Toddler <sup>2</sup>	48	8:30 - 9:00 AM	5:30 - 6:00 PM					
After-school <sup>2</sup>	25	1:30 - 3:30 PM	6:00 - 6:30 PM					
Total Students	240							
Source: Vidyarambh Santa Clara LLC Operational Plan								

<sup>1</sup> The program would remain in the existing building

<sup>2</sup> The program is proposed for the additional building

# Table 2AM and PM Peak Hour Options

	Peak Hour	# Students
	8:00 - 9:00 AM	118
AM peak hour options	8:30 - 9:30 AM	95
DM pools hour options	5:00 - 6:00 PM	118
PM peak hour options	5:30 - 6:30 PM	123

Santa Clara requires transportation studies for projects that would generate 100 or more new trips during the peak hour. Since the project is estimated to generate fewer than 100 peak hour trips, there would be no noticeable change to traffic operations in the area. Therefore, it is likely that no further traffic study is needed.

# Table 3Project Trip Generation Estimates

				Daily		AM Peak Hour					PM Peak Hour					
Land Use		Size	Rate	Trips	Rate	In	Out	In	Out	Total	Rate	In	Out	In	Out	Total
Proposed Use																
Day Care Center - Daily Use	240	students	4.09	982												
Day Care Center - AM Use	118	students			0.78	53%	47%	49	43	92						
Day Care Center - PM Use	123	students									0.79	47%	53%	46	51	97
Net Project Trips				982				49	43	92				46	51	97
Note:																
Rates are from: Institute of Trar	nsportat	ion Enginee	ers, <i>Trip</i>	Generat	tion, 10t	th Edi	tion, 2	2017								
Day Care Center (Land Use 565) average trip rates expressed in trips per students are used.																



### **Vehicle Miles Traveled**

The proposed project is a daycare center. Since the City has not established thresholds of significance for daycare centers, the project cannot be evaluated directly using the City's VMT Tool. For the purpose of VMT evaluation, the trip estimates for the proposed daycare project were converted to trip estimates equivalent to local-serving retail land use. This is because people tend to bring their children to a daycare center that is close to their home or work. Therefore, new daycare centers tend to reduce trip lengths, just like local-serving retail development. Local-serving retail land use is defined as retail projects below 50,000 square feet. Based on the conversion process, a daycare center with 240 students would generate daily trips equivalent to 26,000 square feet of retail space, which is under the 50,000 square feet threshold. It is presumed that local-serving retail projects will have a less-than significant VMT impact and will not require a detailed CEQA transportation analysis. Thus, the proposed project meets the screening criteria set forth in the City's *Draft Vehicle Miles Traveled Transportation Analysis Policy*, and the project does not require a detailed CEQA transportation analysis. Table 4 shows the conversion of daily trips from daycare center to local-serving retail.

#### Table 4

#### Daily Trip Conversion from Day Care Center to Local-Serving Retail

			Da	ily					
Land Use	;	Size	Rate	Trips					
Proposed Uses									
Day Care Center <sup>1</sup>	240	students	4.09	982					
Conversion to Local-Serving Retail									
Retail <sup>2</sup>	26.0	ksf	37.75	982					
Note: Trip rates for day care center and shopping center are from the ITE Trip Generation Manual, 10th Edition, 2017. ksf = 1,000 square feet 1. Day Care Center (Land Use 565) average rates expressed in trips per students are used. 2. Shopping Center (Land Use 820) average rates expressed in 1,000 square feet (ksf) are used.									

